AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the above-identified application:

Claim 1 (currently amended): A generator comprising:

a rotor frame including a cylindrical body, the cylindrical body having an inner surface and an outer surface and defining an interior cavity[[, and]];

a driveshaft coupled to the cylindrical body;

a first rotor armature coupled to the inner surface of the cylindrical body, the first rotor armature defining a space to receive a stator assembly; and

a second rotor armature coupled to the outer surface of the cylindrical body and electrically coupled to the first rotor armature.

Claim 2 (currently amended): The generator of claim 1 further comprising:

a first stator positioned within the space defined by the first rotor armature; and

a second ~~rotor armature~~ stator surrounding the second rotor armature.

Claim 3 (original): The generator of claim 2 wherein a direct current applied to the first stator generates a static magnetic field which induces an alternating current in the first rotor armature when the driveshaft is rotated.

Claim 4 (original): The generator of claim 3 further comprising:

one or more rectifying diodes coupled between the first rotor armature and the second rotor armature, the one or more rectifying diodes to transform the alternating current in the first rotor armature into a direct current in the second rotor armature.

Claim 5 (original): The generator of claim 4 wherein the one or more rectifying diodes are configured as a full-wave rectifying bridge.

Claim 6 (original): The generator of claim 4 further comprising:

a diode ring assembly disposed within the interior cavity of cylindrical body of the rotor frame, the diode ring to secure the one or more rectifying diodes.

Claim 7 (original): The generator of claim 4 wherein the direct current in the second rotor armature generates a magnetic field which, in turn, induces an alternating current in the second stator.

Claim 8 (original): The generator of claim 4 wherein the direct current in the second rotor armature generates a magnetic field which, in turn, induces a three-phase voltage.

Claim 9 (original): The generator of claim 8 further comprising:

a plurality of terminals electrically coupled to the second stator to provide the three-phase voltage.

Claim 10 (original): The generator of claim 2 further comprising:

a generator housing having a substantially cylindrical body along a first common axis with the driveshaft, the first stator fixedly coupled to the cylindrical body along the first common axis, the second stator fixedly coupled to the inner circumference of the cylindrical body of the generator housing.

Claim 11 (original): The generator of claim 10 further comprising:

a flange coupled to the generator housing to enclose the first stator, second stator, first rotor armature and second rotor armature, the flange including a passage to permit the driveshaft to extend outside the generator housing.

Claim 12 (original): The generator of claim 10 further comprising:

a plurality of bearings disposed within the generator housing to facilitate the rotation of the rotor frame.

Claim 13 (original): The generator of claim 1 wherein the first rotor armature includes one or more windings.

Claim 14 (original): The generator of claim 13 wherein the second rotor armature includes one or more windings corresponding to the windings in the first rotor armature.

Claim 15 (currently amended): A generator assembly comprising:

a cylindrical body, the cylindrical body having an inner surface, an outer surface, an axis, and defining an interior cavity;

a driveshaft coupled to the cylindrical body along the axis of the cylindrical body;

a first rotor assembly coupled to the inner surface of the cylindrical body, the first rotor assembly defining a space to receive a stator;

a first stator positioned within the space defined by the first rotor assembly but independent from the cylindrical body;

a second rotor assembly coupled to the outer surface of the cylindrical body and electrically coupled to the first rotor assembly; and

a second stator arranged around the second rotor assembly and radially positioned about the axis of the cylindrical body.

Claim 16 (original): The generator assembly of claim 15 wherein a direct current applied to the first stator generates a static magnetic field which induces an alternating current in the first rotor assembly when the driveshaft and cylindrical body are rotated, the alternating current in the first rotor assembly is rectified to generate a direct current in the second rotor assembly, the direct current in the second rotor assembly generates a magnetic field which, in turn, induces an alternating current in the second stator.

Claim 17 (original): The generator assembly of claim 16 further comprising:

one or more rectifying diodes coupled between the first rotor assembly and the second rotor assembly, the one or more rectifying diodes to transform the alternating current in the first rotor assembly into a direct current in the second rotor assembly.

Claim 18 (original): The generator assembly of claim 17 wherein the one or more rectifying diodes are configured as a full-wave rectifying bridge.

Claim 19 (original): The generator assembly of claim 15 wherein a direct current applied to the first stator generates a static magnetic field which induces an alternating current in the first rotor assembly when the driveshaft is rotated.

Claim 20 (currently amended): An electric generator comprising:

a cylindrical body, the cylindrical body having an inner surface, an outer surface, an axis, and defining an interior cavity;

a driveshaft coupled to the cylindrical body along the axis of the cylindrical body;

a first rotor assembly coupled to the inner surface of the cylindrical body, the first rotor assembly defining a space to receive a stator;

a first stator positioned within the space defined by the first rotor assembly but independent from the cylindrical body, when a direct current is applied to the first stator it generates a static magnetic field which induces an alternating current in the first rotor assembly when the driveshaft and cylindrical body are rotated;

a second rotor assembly coupled to the outer surface of the cylindrical body and electrically coupled to the first rotor assembly;

one or more rectifying diodes coupled between the first rotor assembly and the second rotor assembly, the alternating current in the first rotor assembly is rectified by the one or more rectifying diodes to generate a direct current in the second rotor assembly, the direct current in the second rotor assembly generates a magnetic field; and

a second stator arranged around the second rotor assembly and radially positioned about the axis of the cylindrical body, the magnetic field in the second rotor assembly induces an alternating current in the second stator.